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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,868	07/21/2004	Jean-Pierre Devidal	021305-00201	8688
4372	7590	03/23/2006	EXAMINER	
ARENT FOX PLLC 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			ALSTRUM ACEVEDO, JAMES HENRY	
			ART UNIT	PAPER NUMBER
			1616	
DATE MAILED: 03/23/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/500,868	<b>Applicant(s)</b> DEVIDAL ET AL.	
	<b>Examiner</b> James H. Alstrum-Acevedo	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 10-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/21/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

**Claims 1-16 are pending.** Claims 1-9 are under consideration in the current office action on the merits of the instant application.

#### *Election/Restrictions*

Applicant's election without traverse of Group I (claims 1-9) in the reply filed on January 20, 2006 is acknowledged. Claims 10-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 20, 2006.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

**Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim

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indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 1 and 5 recite the broad recitation “a method for the treatment (claim 1)” and “the pressure is between 5 and 70 bar”, and the claim also recite “in particular cosmetic (claim 1) and “in particular between 10 and 25 bar (claim 5)” which is the narrower statement of the range/limitation.

Claims 1, 7, and 9 are vague and indefinite, because they contain a reference to an item of a figure contained within parentheses. It is unclear whether the item in parentheses is meant solely to function as an example or whether it is intended as an additional limitation. Furthermore, claims should not require the reader to refer to the disclosure to determine what is the claimed subject matter, aside from using the specification as a definition. Appropriate correction is required.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the pressure that is sufficient, “such that there is no risk or breaking the skin in the said area,” whilst imposing a maximum pressure for effective penetration of the said liquid.

The terms “such that there is no risk” and “maximum pressure” in claim 4 is a relative term which renders the claim indefinite. The term “such that there is no risk” and “maximum pressure” are not defined by the claim, the specification does not provide a standard for

ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. A person of ordinary skill in the art at the time of the instant invention would not be able to ascertain what pressure Applicant intended by the term “maximum pressure.” It would not have been readily apparent to a skilled artisan what a “pressure such that there is no risk” of breaking the skin would be, without resorting to undue experimentation.

Claims 6, 7, and 8 are vague and indefinite, because the claim limitations are unrelated to a method of treatment. Rather, the recited claim limitations appear to relate to a device. It is noted that Applicant is claiming a method of treatment, not a device.

The remaining claims are rejected as depending from a rejected claim.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bode et al. (DE 19606433; English abstract only, submitted with the restriction requirement mailed January 10, 2006).**

Bode discloses a device using a pneumatic or hydraulic pressure medium for applying a treatment product in the form of a cream, liquid, or gas to the required skin area via an application jet. The pressure of the pressure medium can be adjusted between 0 and 8 bar, in a number of discrete steps, with the treatment product mixed with the pressure medium, or applied to the skin before application of the jet. A schematic of the device disclosed by Bode, comprising a nozzle (137), is also present in the abstract. It is noted that liquid cosmetics

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inherently contain water. Creams also inherently contain additives, which is interpreted as being anything other than the active compound, including solvents, such as water.

**Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by the commercially available product OFF!®.**

OFF!® is a product of the company SC Johnson, which according to information readily available on the internet, has remained one of the most popular repellants in the United States for over 40 years. This product is a well-known insect repellant topically applied to the skin from a spray can. The contents of the can are under pressure and the can inherently contains a spray nozzle. Use of OFF!® inherently comprises the step of “sucking sprayed liquid with a view to discharging it.”

**Claims 1-4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fitzjarrell (U.S. Patent No. 5,989,523).**

Fitzjarrell discloses a method and composition for treating outbreaks of acne. Initially, the acne-affected area is cleaned. A topical spray comprising about 1 to 10 wt % niacinamide, about 0.1 to 1 wt % Aloe Vera extract and about 0.1 to 1 wt % NaPCA in a water carrier is then applied to the area. Generally, at least two spray applications are made each day. For optimum skin cleaning, an exfoliation scrub such as a conventional apricot facial scrub is preferably applied to the skin prior to application of the combination topical spray (abstract). Aloe vera is an additive.

Fitzjarrell discloses that after the skin is cleansed, the topical solution is sprayed on the area as indicated. In most cases, the central facial area covering the nose and chin is most in

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need of treatment. Any suitable spraying device may be used, such as conventional pump or aerosol sprayers (col. 22, lines 55-60).

The method disclosed by Fitzjarrell inherently comprises the step of spray a pressurized liquid.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode et al. (DE 19606433; English abstract only) in view of Yu et al. (5,962,526).**

The disclosures of Bode have been set forth above.

Bode lacks the disclosure of a liquid comprising water or saline and/or at least one additive used in a method of treatment.

Yu teaches a composition and method for enhancing therapeutic effects of topically applied agents are disclosed. The cosmetic or therapeutic composition may include one or more of cosmetic or pharmaceutical agents present in a total amount of from 0.01 to 40 percent and one or more of hydroxycarboxylic acids or related compounds present in a total amount of from 0.01 to 99 percent by weight of the total composition. The cosmetic and pharmaceutical agents may include age spots, wrinkles and keratoses removing agents; vitamins; aloes; sun screens; tanning, depigmenting and shampooing agents; other dermatological agents, etc. The hydroxycarboxylic acids and related compounds include organic alpha and beta hydroxycarboxylic acids, alpha and beta ketocarboxylic acids and salts thereof. Topical application of the cosmetic or therapeutic composition has been found to achieve a substantial increase in cosmetic or therapeutic effect of the active ingredient in humans and domesticated animals (abstract). Hydroxycarboxylic acids are additives.

Yu teaches that any hydroxyacid and related compound may be used as an additive in a combination composition to enhance percutaneous penetration or the therapeutic efficacy of cosmetic and pharmaceutical agents (col. 6, lines 27-30).



Yu teaches that the therapeutic compositions are prepared in solution form by dissolution of at least one hydroxyacid and a cosmetic or pharmaceutical agent with solvents including water or other pharmaceutically acceptable vehicle (col. 6, lines 63-67 and col. 4, line 1). The therapeutic compositions may also be prepared in cream or ointment form by conventional mixing of a therapeutic solution of Yu's invention with an appropriate cream or ointment base (col. 7, lines 6-12). Therapeutic compositions in the form of a gel or spray may also be formulated (col. 7, lines 15-16).

Yu teaches in the section entitled "Test Results" of the treatment of various conditions, including dry skin, psoriasis, age spots, wrinkles, keratoses, pigmented skin lesions, and acne. The tables presented within this section all demonstrated that the inclusion of hydroxyacid additives within therapeutic and/or cosmetic compositions resulted in moderate, but in most cases significant or complete improvement of the treated condition.

It would have been obvious to a person of ordinary skill in the art at the time of the instant invention to combine the teachings of Bode and Yu, because Bode teaches a device for applying a treatment product, including products in the form of a cream or liquid, to an area of the skin and Yu teaches cosmetic/pharmaceutical compositions which may be topically applied to the skin. A skilled artisan would have been motivated to combine the teachings of Bode and Yu, because Yu's compositions, which may be topically applied, were shown to achieve a substantial increase in cosmetic or therapeutic effect of the active ingredient in humans and domesticated animals and Bode's device was designed to apply a treatment product to the skin. For the reasoning set forth above, a person of ordinary skill in the art at the time of the instant invention would have had a reasonable expectation of success.

**Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bode et al. (DE 19606433; English abstract only) in view of Rhoades (US 2001/0018061).**

The teachings of Bode have been set forth above.

Bode lacks the teaching of a method of treatment wherein the *stratum corneum*, the outer layer of skin, is abraded.

Rhoades teaches a composition including a base and a plurality of abrasive particles, an apparatus suitable for contacting localized areas of human skin, and a method including applying a composition to an area of human skin, the composition comprising a base and a plurality of abrasive particles, and manipulating the composition over the area of human skin with a handle-operated instrument (abstract).

Rhoades teaches in [0004] that microdermabrasion (e.g., microexfoliation, particle skin resurfacing) is a technique in skin care in which a controlled exfoliation of the skin is performed to improve and remove skin abnormalities. A typical microdermabrasion machine consists of a compressor to project inert crystals of corundum through a tube into a hand piece across the skin with variable pressure while the hand piece is in contact with the skin. This induces an abrasion action, which removes the top layer of skin. At the same time, through another tube within the hand piece, the used corundum and abraded skin are vacuumed into another container for disposal. The removal of the outer layer of skin induces the human body to produce a new layer of skin, which is believed to improve the skin subject to treatment, including the appearance of wrinkles, acne, scars, age spots, damaged skin, etc [0013].

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Rhoades teaches that a principal component of his invented composition includes a moisturizer, which includes humectants, such as glycerin, alpha hydroxy acids, etc. [0014]. Suitable moisturizers may be in the form of liquids, creams gels, pastes, and emollients. Rhoades' invented compositions may be applied with Rhoades invented apparatus, described in [0031].

It would have been obvious to a person of ordinary skill in the art at the time of the instant invention to combine the teachings of Bode and Rhoades, because all references teach methods and/or devices for treating the skin or applying compositions intended for the treatment of skin. A skilled artisan would have been motivated to combine the teachings of Rhoades with those of Bode, because the skin microexfoliation (i.e. abrasion of the stratum corneum) resulting from application of Rhoades' composition would promote the improvement of undesirable skin aesthetics by inducing the growth of a new outer layer of skin in the treated area. It would have been apparent to a skilled artisan that it is desirable to apply Rhoades' composition and exfoliate the outer layer of skin as an initial step in skin treatment, because this would promote the growth of a new layer of skin and the improvement of undesirable skin appearance. A person of ordinary skill in the art at the time of the instant invention would have had a reasonable expectation of success upon combination of the prior art references, because Bode's device is designed to apply treatment products to areas of the skin and Rhoades' compositions are designed for skin treatments.

**Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode et al. (DE 19606433; English abstract only) in view of Hirota (U.S. Patent No. 5,894,963).**

The teachings of Bode have been set forth above.

Bode lacked the teaching of a method of treatment comprising a step of “sucking the sprayed”, wherein the suction is performed by means of an annular suction chamber.

Hirota teaches a pump mechanism for ejecting liquid, which can eject a fixed amount of a given liquid, such as a liquid medicine, at a time in the form of a spray or jet. Containers for holding a liquid medicine for nose or throat treatment, for instance, are usually provided with a built-in pump mechanism for ejecting the liquid medicine on affected parts of a human body (col. 1, lines 5-11).

Hirota teaches that when the force which has been applied to the operating nozzle head 60 is removed, a restoring force of the spring 17 causes the second piston 30, first piston 20 and operating nozzle head 60 to move upward back to their home positions (FIG. 1). Since a negative pressure (i.e. suction) is produced inside the metering chamber A at this point, a mass of liquid is sucked from the container 50 into the metering chamber A by way of the suction tube 13, the intake port 12b in the stationary cylinder 10, the small-diameter portion 12, axial hole 33 and nonreturn valve 34 (col. 5, lines 28-33). A tube, wherein a liquid is suctioned, reads on an annular suction chamber.

Hirota teaches that the inventive pump mechanism is suited for a wide variety of liquid ejecting applications in which a liquid is ejected in either a solid stream or a fine mist, including liquid medicines for nose and throat treatment, liquid cosmetic products, detergent, oil, etc. (col. 7, lines 11-16).

It would have been obvious to a person of ordinary skill in the art at the time of the instant invention to combine the teachings of Bode and Hirota, because both Bode and Hirota

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teach devices intended in part or whole to apply cosmetic products. A skilled artisan would have been motivated to combine the teachings of Hirota with the teachings of Bode, because Bode teaches a device for the application of a liquid treatment product and Hirota teaches a pump mechanism suited for applications in which a liquid, including a liquid cosmetic product, is ejected either as a solid stream or a fine mist. A person of ordinary skill in the art at the time of the instant invention would have had a reasonable expectation of success upon combination of the prior art references, because both Bode's and Hirota's inventions are suitable for application liquid products.

**Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bode et al. (DE 19606433; English abstract only) in view of Yu et al. (5,962,526) as applied to claims 2-3 above, and further in view of Laughlin (U.S. 2002/0000237).**

The teachings of Bode have been set forth above.

Bode lacks the teaching of a method of treating comprising the steps consisting of filtering the liquid and recycling (i.e. reusing) it.

Laughlin teaches a system for coating human skin, a chemical composition, such as a cosmetic or medical formulation, is uniformly coated over the entire body or selected parts of the body of the person being coated (abstract).

Laughlin teaches that the final element of this invention is recovery, or filtering, of residual composition. This feature greatly enhances the utility of the invention because it allows the system to be self-contained in an indoor environment and promotes a more environmentally friendly process. One configuration of the recovery system is shown in FIG. 5 [0210].

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It would have been obvious to a person of ordinary skill in the art at the time of the instant invention to combine the teachings of Bode and Yu with the teachings of Laughlin, because both Bode and Laughlin teach systems intended for application to the skin and Yu teaches a cosmetic composition for application to the skin. A skilled artisan would have been motivated to incorporate the steps of filtering and recovery of the residual composition in Bode's device to promote a more environmentally friendly process. A person of ordinary skill in the art would have had a reasonable expectation of success upon combination of the prior art references, because all there references are in the cosmetic art, Bode and Laughlin's inventions pertain to devices/systems for the application of compositions to the skin, and Yu teaches a cosmetic formulation for application to the skin.

#### ***Other Matter***

The Examiner has noted the following informalities: the comma in claim 4, line 4, after the word "the" and before the word "said," is unnecessary. The Examiner respectfully suggests removing the comma in claim 4, line 4. The article "the" preceding the word "said" in claim 4, line 4 is spurious, and the Examiner respectfully suggests removing the article "the." Claim 6 does not end with the proper punctuation, a period, but instead ends in a comma. The word "suction" in claim 7, line 2 is misspelled as "auction." Appropriate correction is required.

#### ***Conclusion***

**Claims 1-9 (all claims) are rejected. No claims are allowed.**

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Alstrum-Acevedo whose telephone number is (571) 272-5548. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on (571) 272-0887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James H. Alstrum-Acevedo, Ph.D.  
Examiner

  
